Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

TEJUS CONSULTANTS

AGGREGATE IMPACT VALUE
(IS: 2386 Part - 4)

Proposed Use	WMM	**Date of Sampling**	05-09-19
Sample Location	At plant	**Date of Testing**	05-09-19

Sl. No.	Description		Test No. 1	Test No. 2	Test No. 3	Spec Limit (%)
1	Wt. of stone pieces (dry) passing IS Sieve 12.5mm but retained in IS sieve 10mm (gm)	(Wa)	392.00	388.00	395.00	
2	Wt. of the fraction retained in IS sieve 2.36mm after the impact test (gm)	(Wb)	305.00	299.00	304.00	
3	Wt. of the fraction passed in IS sieve 2.36mm after the impact test (gm)	(Wc)	87.00	89.00	91.00	
4	Aggregate Impact Value (%)	(Wc/Wa)*100	22.19	22.94	23.04	
5	Average Aggregate impact value	(%)	22.72			Max - 30 %

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

FLAKINESS AND ELONGATION INDICES (IS 2386, PART 1)

Type of Material	WMM	Proposed Use	WMM
Sample Location	At plant	Date of Sampling	05-09-19
		Date of Testing	05-09-19

Size of aggregate		Flakiness Index		Elongation Index	
Passing through IS sieve, mm	Retained on IS sieve, mm	Total wt. of aggregate retained on sieves (A) gms.	Wt. of aggregate passing from Flakiness gauge (B) gms	Wt. of aggregate retained on Flakiness gauge (C) gms	Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms
63.0	50.0	0	0	0	0
50.0	40.0	0	0	0	0
40.0	31.5	0	0	0	0
31.5	25.0	0	0	0	0
25.0	20.0	0	0	0	0
20.0	16.0	615	75	540	70
16.0	12.5	1130	125	1005	110
12.5	10.0	775	65	710	65
10.0	6.3	625	50	575	50
Total		3145	315	2830	295

Note: Minimum 200 Pcs should be taken on each fraction of test

Flakiness Index(%):	10.02
Elongation Index(%):	10.42
Combined FI+EL (%)	20.44

Consultant's Representative

Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS, Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	05-09-19
Type of Mix	:	WMM
Sample I/D	:	WMM 1

GRADATION FOR WMM
(As per MORT&H 400-11)

Sample Location:	At plant		Date of Sampling:	05-09-19	
			Date of testing:	05-09-19	
Type of material & Purpose:	WMM		Oven Dry Wt.(gms):	10000.0	
IS Sieve size in mm	**Weight retained**	**Cummulative weight retained (gm)**	**Cummulative % of retained**	**Cummulative % of passing**	**Specification limits**
53	0	0	0.00	100.00	100.00
45	300	300	3.00	97.00	95-100
22.4	2224	2524	25.24	74.76	60-80
11.2	1865	4389	43.89	56.11	40-60
4.75	1850.0	6239	62.39	37.61	25-40
2.36	1480.0	7719	77.19	22.81	15-30
0.6	820.0	8539	85.39	14.61	8.0-22.0
0.075	950.0	9489	94.89	5.11	0-8
Pan	511.0				
Total	10000.0				

Consultant's Representative

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TEJUS
CONSULTANTS

Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	06-09-19
Type of Mix	:	WMM
Sample I/D	:	WMM 2

GRADATION FOR WMM
(As per MORT&H 400-11)

Sample Location:	At plant		Date of Sampling:	06-09-19	
			Date of testing:	05-09-19	
Type of material & Purpose:	WMM		Oven Dry Wt.(gms):	10000.0	
IS Sieve size in mm	**Weight retained**	**Cummulative weight retained (gm)**	**Cummulative % of retained**	**Cummulative % of passing**	**Specification limits**
53	0	0	0.00	100.00	100.00
45	310	310	3.10	96.90	95-100
22.4	2230	2540	25.40	74.60	60-80
11.2	1875	4415	44.15	55.85	40-60
4.75	1844.0	6259	62.59	37.41	25-40
2.36	1485.0	7744	77.44	22.56	15-30
0.6	815.0	8559	85.59	14.41	8.0-22.0
0.075	955.0	9514	95.14	4.86	0-8
Pan	486.0				
Total	10000.0				

Consultant's Representative

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

FLAKINESS AND ELONGATION INDICES (IS 2386, PART 1)

Type of Material	WMM	Proposed Use	WMM
Sample Location	At plant	Date of Sampling	26-09-19
		Date of Testing	26-09-19

Size of aggregate		Flakiness Index		Elongation Index	
Passing through IS sieve, mm	Retained on IS sieve, mm	Total wt. of aggregate retained on sieves (A) gms.	Wt. of aggregate passing from Flakiness gauge (B) gms	Wt. of aggregate retained on Flakiness gauge (C) gms	Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms
63.0	50.0	0	0	0	0
50.0	40.0	0	0	0	0
40.0	31.5	0	0	0	0
31.5	25.0	0	0	0	0
25.0	20.0	0	0	0	0
20.0	16.0	612	80	532	71
16.0	12.5	1154	112	1042	105
12.5	10.0	770	70	700	66
10.0	6.3	610	60	550	54
Total		**3146**	**322**	**2824**	**296**

Note: Minimum 200 Pcs should be taken on each fraction of test

Flakiness Index(%):	10.24
Elongation Index(%):	10.48
Combined FI+EL (%)	20.72

Consultant's Representative

Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike.
Consultant	:	TEJUS CONSULTANTS, Basaveshwar Nagar Bangalore.
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	26-09-19
Type of Mix	:	WMM
Sample I/D	:	WMM 1

GRADATION FOR WMM
(As per MORT&H 400-11)

Sample Location:	At plant	Date of Sampling:	26-09-19
		Date of testing:	26-09-19
Type of material & Purpose:	WMM	Oven Dry Wt.(gms):	10000.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
53	0	0	0.00	100.00	100.00
45	315	315	3.15	96.85	95-100
22.4	2235	2550	25.50	74.50	60-80
11.2	1880	4430	44.30	55.70	40-60
4.75	1850.0	6280	62.80	37.20	25-40
2.36	1490.0	7770	77.70	22.30	15-30
0.6	820.0	8590	85.90	14.10	8.0-22.0
0.075	950.0	9540	95.40	4.60	0-8
Pan	460.0				
Total	10000.0				

Consultant's Representative

TEJUS
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Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	27-09-19
Type of Mix	:	WMM
Sample I/D	:	WMM 2

GRADATION FOR WMM
(As per MORT&H 400-11)

Sample Location:	At plant		Date of Sampling:	27-09-19	
			Date of testing:	27-09-19	
Type of material & Purpose:	WMM		Oven Dry Wt.(gms):	10000.0	
IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
53	0	0	0.00	100.00	100.00
45	370	370	3.70	96.30	95-100
22.4	2510	2880	28.80	71.20	60-80
11.2	2714	5594	55.94	44.06	40-60
4.75	1414.0	7008	70.08	29.92	25-40
2.36	850.0	7858	78.58	21.42	15-30
0.6	720.0	8578	85.78	14.22	8.0-22.0
0.075	780.0	9358	93.58	6.42	0-8
Pan	642.0				
Total	10000.0				

Consultant's Representative

29/2/2020

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Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	27-09-19
Type of Mix	:	WMM
Sample I/D	:	WMM 2

GRADATION FOR WMM
(As per MORT&H 400-11)

Sample Location:	At plant		Date of Sampling:	27-09-19	
			Date of testing:	27-09-19	
Type of material & Purpose:	WMM		Oven Dry Wt.(gms):	10000.0	
IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
53	0	0	0.00	100.00	100.00
45	380	380	3.80	96.20	95-100
22.4	2555	2935	29.35	70.65	60-80
11.2	2715	5650	56.50	43.50	40-60
4.75	1452.0	7102	71.02	28.98	25-40
2.36	870.0	7972	79.72	20.28	15-30
0.6	710.0	8682	86.82	13.18	8.0-22.0
0.075	785.0	9467	94.67	5.33	0-8
Pan	533.0				
Total	10000.0				

Consultant's Representative

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

Field Dry Density test by Sand Replacement Method (As per IS 2720 (Part 28)

	Date:	**09-11-19**
Layer no. or level	WMM I layer	
Depth of hole	250mm	
Field density:	1	2
Wt. of wet material from hole (Ww) gms.	6234	6124
Wt. of sand+cylinder before pouring (w1) gms.	14000	14000
Wt. of sand+cylinder after pouring (w2) gms.	9710	9750
Wt. of sand in cone (w3) gms.	835	842
Wt. of sand in hole (w4)=(w1-w2-w3) gms.	3455	3408
Bulk density of sand (γs)gm/cc	1.31	1.31
Bulk density of material(i.e. wt. of the wet material) (γb)=(Ww/w4*(γs))gm/cc	2.36	2.35
Moisture meter reading(moisture content)	12.10	12.10
Result		
FDD(Wt.of the dry material)=(100γb/100+mc)gm/cc	2.11	2.10
MDD	2.14	2.14
OMC	13.50%	13.50%
% compaction obtained	98.53	98.13
% compaction required	98%	98%

Consultant's Representative

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

Field Dry Density test by Sand Replacement Method (As per IS 2720 (Part 28)

	Date:	**10-11-19**
Layer no. or level	WMM I layer	
Depth of hole	250mm	
Field density:	1	2
Wt. of wet material from hole (Ww) gms.	6180	6250
Wt. of sand+cylinder before pouring (w1) gms.	14000	14000
Wt. of sand+cylinder after pouring (w2) gms.	9714	9700
Wt. of sand in cone (w3) gms.	850	830
Wt. of sand in hole (w4)=(w1-w2-w3) gms.	3436	3470
Bulk density of sand (γs)gm/cc	1.32	1.31
Bulk density of material(i.e. wt. of the wet material) (γb)=(Ww/w4*(γs))gm/cc	2.37	2.36
Moisture meter reading(moisture content)	12.20	12.20
Result		
FDD(Wt.of the dry material)=(100γb/100+mc)gm/cc	2.12	2.10
MDD	2.14	2.14
OMC	13.50%	13.50%
% compaction obtained	98.88	98.27
% compaction required	98%	98%

Consultant's Representative

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

AGGREGATE IMPACT VALUE (IS: 2386 Part - 4)

Proposed Use	DBM	Date of Sampling	12-11-19
Sample Location	At plant	Date of Testing	12-11-19

Sl. No.	Description		Test No. 1	Test No. 2	Test No. 3	Spec Limit (%)
1	Wt. of stone pieces (dry) passing IS Sieve 12.5mm but retained in IS sieve 10mm (gm)	(Wa)	392.00	372.00	378.00	
2	Wt. of the fraction retained in IS sieve 2.36mm after the impact test (gm)	(Wb)	296.00	280.00	275.00	
3	Wt. of the fraction passed in IS sieve 2.36mm after the impact test (gm)	(Wc)	96.00	92.00	103.00	
4	Aggregate Impact Value (%)	(Wc/Wa)*100	24.49	24.73	27.25	
5	Average Aggregate impact value	(%)	25.49			Max - 30 %

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

TEJUS
CONSULTANTS

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

FLAKINESS AND ELONGATION INDICES (IS 2386, PART 1)

Type of Material	DBM	**Proposed Use**	**DBM**
Sample Location	At plant	**Date of Sampling**	12-11-19
		Date of Testing	12-11-19

Size of aggregate		**Flakiness Index**		**Elongation Index**	
Passing through IS sieve, mm	**Retained on IS sieve, mm**	**Total wt. of aggregate retained on sieves (A) gms.**	**Wt. of aggregate passing from Flakiness gauge (B) gms**	**Wt. of aggregate retained on Flakiness gauge (C) gms**	**Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms**
63.0	50.0	0	0	0	0
50.0	40.0	0	0	0	0
40.0	31.5	7850	680	7170	380
31.5	25.0	4256	205	3569	290
25.0	20.0	2450	270	1978	210
20.0	16.0	1568	340	1000	270
16.0	12.5	560	98	462	156
12.5	10.0	280	60	230	89
10.0	6.3	130	80	80	56
Total		**17094**	**1733**	**14489**	**1451**

Results

Flakiness Index(%):	10.14
Elongation Index(%):	10.01
Combined FI+EL (%)	20.15

Consultant's Representative

TEJUS
CONSULTANTS

Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	12-11-19
Type of Mix	:	DBM
Sample I/D	:	DBM-1

GRADATION FOR DBM

(As per MORT&H 500-10,Grading-2)

Sample Location:	At plant	**Date of Sampling:**	12-11-19
		Date of testing:	12-11-19
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	1500.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0	0	0.00	100.00	100.00
26.50	80	80	5.33	94.67	90-100
19.00	110	190	12.67	87.33	71-95
13.20	230	420	28.00	72.00	56-80
4.750	340	760	50.67	49.33	38-54
2.360	185	945	63.00	37.00	28-42
0.300	280	1225	81.67	18.33	7-21
0.075	180	1405	93.67	6.33	2-8
Pan	95				
Total	1500.0				

Consultant's Representative

TEJUS
CONSULTANTS

DETERMINATION OF BITUMEN CONTENT AND GRADATION DENSE BITUMINOUS MACADAM MIX

Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	13-11-19
Type of Mix	:	DBM
Sample I/D	:	DBM-1

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	825	850
2. Weight of Mixture after extraction, g	789	813
3. Weight of Bitumen	36	37
4. Weight of filter paper before extraction, g	2.00	2.00
5. Weight of filter paper after extraction, g	4.00	4.00
6. Weight of fines, g	2.00	2.00
7. Weight of Bitumen & fines	38.00	39.00
8. Bitumen content in %	4.61	4.59
9. Average Bitumen content in %	4.60	
10. Minimum Bitumen content in %	4.50	

GRADATION FOR DBM AFTER EXTRACTION

(As per MORT&H 500-10,Grading-2)

Sample Location:	At site	**Date of Sampling:**	13-11-19
		Date of testing:	13-11-19
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	789

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0.0	0.0	0.00	100.00	100.00
26.50	40.0	40.0	5.07	94.93	90-100
19.00	110.0	150.0	19.01	80.99	71-95
13.20	115.0	265.0	33.59	66.41	56-80
4.750	172.0	437.0	55.39	44.61	38-54
2.360	90.0	527.0	66.79	33.21	28-42
0.300	135.0	662.0	83.90	16.10	7-21
0.075	78.0	740.0	93.79	6.21	2-8
Pan	49.0				
Total	789.0				

Consultant's Representative

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Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	13-11-19
Type of Mix	:	Tack coat
Sample I/D	:	1

DETERMINATION OF RATE OF SPREAD TACK COAT

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.780	0.748
Final weight of plate after application of tack Coat (c)	Kg	0.803	0.771
Weight of tack Coat (d=c-b)	Kg	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.256	0.256
Average	Kg/sq.m	0.256	
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**	

Consultant's Representative

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BITUMEN CONTENT AND GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM MIX		
Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	14-11-19
Type of Mix	:	DBM
Sample I/D	:	DBM-1

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	835	945
2. Weight of Mixture after extraction, g	799	904
3. Weight of Bitumen	36	41
4. Weight of filter paper before extraction, g	2.00	2.00
5. Weight of filter paper after extraction, g	4.00	4.00
6. Weight of fines, g	2.00	2.00
7. Weight of Bitumen & fines	38.00	43.00
8. Bitumen content in %	4.55	4.55
9. Average Bitumen content in %	4.55	
10. Minimum Bitumen content in %	4.50	

GRADATION FOR DBM AFTER EXTRACTION

(As per MORT&H 500-10,Grading-2)

Sample Location:	At site	**Date of Sampling:**	14-11-19
		Date of testing:	14-11-19
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	799

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0.0	0.0	0.00	100.00	100.00
26.50	38.0	38.0	4.76	95.24	90-100
19.00	120.0	158.0	19.77	80.23	71-95
13.20	110.0	268.0	33.54	66.46	56-80
4.750	160.0	428.0	53.57	46.43	38-54
2.360	89.0	517.0	64.71	35.29	28-42
0.300	128.0	645.0	80.73	19.27	7-21
0.075	100.0	745.0	93.24	6.76	2-8
Pan	54.0				
Total	799.0				

Consultant's Representative

TEJUS
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Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	14-11-19
Type of Mix	:	Tack coat DBM
Sample I/D	:	2

DETERMINATION OF RATE OF SPREAD TACK COAT

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.768	0.774
Final weight of plate after application of tack Coat (c)	Kg	0.791	0.797
Weight of tack coat (d=c-b)	Kg	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.256	0.256
Average	Kg/sq.m	0.256	
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**	

Consultant's Representative

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

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AGGREGATE IMPACT VALUE (IS: 2386 Part - 4)

Proposed Use	BC	Date of Sampling	02-12-19
Sample Location	At plant	Date of Testing	02-12-19

Sl. No.	Description		Test No. 1	Test No. 2	Test No. 3	Spec Limit (%)
1	Wt. of stone pieces (dry) passing IS Sieve 12.5mm but retained in IS sieve 10mm (gm)	(Wa)	398.00	392.00	378.00	
2	Wt. of the fraction retained in IS sieve 2.36mm after the impact test (gm)	(Wb)	301.00	295.00	290.00	
3	Wt. of the fraction passed in IS sieve 2.36mm after the impact test (gm)	(Wc)	97.00	97.00	88.00	
4	Aggregate Impact Value (%)	(Wc/Wa)*100	24.37	24.74	23.28	
5	Average Aggregate impact value	(%)	24.13			Max - 30 %

Remarks : ✓ Satisfactory / Not Satisfactory

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FLAKINESS AND ELONGATION INDICES (IS 2386, PART 1)

Type of Material	BC	Proposed Use	BC
Sample Location	At plant	Date of Sampling	02-12-19
		Date of Testing	02-12-19

Size of aggregate		Flakiness Index		Elongation Index	
Passing through IS sieve, mm	Retained on IS sieve, mm	Total wt. of aggregate retained on sieves (A) gms.	Wt. of aggregate passing from Flakiness gauge (B) gms	Wt. of aggregate retained on Flakiness gauge (C) gms	Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms
63	50	0	0	0	0
50	40	0	0	0	0
40	31.5	0	0	0	0
31.5	25	0	0	0	0
25	20	0	0	0	0
20	16	948	115	833	75
16	12.5	1135	81	1054	120
12.5	10	680	75	605	55
10	6.3	580	66	514	51
Total		3343	337	3006	301

Note: Minimum 200 Pcs should be taken on each fraction of test

		Flakiness Index(%):	10.08		
		Elongation Index(%):	10.01		
		Combined FI+EL (%)	20.09		

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Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri. Sreenivas Constructions
Date of Testing	:	02-12-19
Type of Mix	:	BC
Sample I/D	:	BC1

GRADATION FOR BC
(As per MORT&H 500-18,Grading-2)

Sample Location:	At plant	Date of Sampling:	02-12-19
		Date of testing:	02-12-19
Type of material & Purpose:	BC	Oven Dry Wt.(gms):	1200.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	125	125.0	10.42	89.58	79 - 100
9.50	80	205.0	17.08	82.92	71 - 95
4.75	220	425.0	35.42	64.58	53 - 71
2.360	150	575.0	47.92	52.08	42 - 58
1.180	135	710.0	59.17	40.83	34 - 48
0.600	120	830.0	69.17	30.83	26 - 38
0.300	90	920.0	76.67	23.33	18 - 28
0.150	75	995.0	82.92	17.08	12 - 20
0.075	115	1110.0	92.50	7.50	4 - 10
Pan	90.0				
Total	1200.0				

Consultant's Representative

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